United States Environmental Protection Agency

Region 5
Air and Radiation Division
77 West Jackson Boulevard
Chicago, IL 60604-3590

DATE: | AUG 0 8 2012

SUBJECT: Unannounced Inspection of Howard Finishing, LLC

Roseville and Madison Heights, Michigan

FROM: Ray Cullen, Environmental Engineer

Air Enforcement and Compliance Assurance Section (MI/WI)

THRU: Sara Breneman, Chief

Air Enforcement and Compliance Assurance Section (MI/WI)

TO: File

Facility: Howard Finishing, LLC

Location: Roseville and Madison Heights, Michigan

Inspection Date: July 11, 2012

Inspection Team: Ray Cullen, EPA Region 5

Roshni Brahmbhatt, EPA Region 5

Krista Reed, MDEQ

Facility Attendees: David Clarke, Chemist

Leslie Pholen, Safety Manager Popat Patel, Environmental Dijac Jakupovic, Line Operator

Purpose of Inspection:

This unannounced inspection was one of several Roshni Brahmbhatt and I conducted in Michigan to check affected sources' compliance with the National Emissions Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks at 40 C.F.R. Part 63, Subpart N (Subpart N) and the National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations at 40 C.F.R. Part 63, Subpart WWWWW (Subpart WWWWWW), if applicable.

Environmental Justice Ranking:

The U.S. Environmental Protection Agency uses the Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT) to identify areas with potentially disproportionately high environmental and public health burdens. Areas are assigned an EJSEAT score between 1 and 10, with 1 being the highest indication that the area is an EJ area of concern. Howard Finishing, LLC (Howard Finishing) has facilities in Roseville and Madison Heights, Michigan, which are located in areas with an EJSEAT score of 4 and 3, respectively.

Inspection Overview:

Ms. Brahmbhatt, Krista Reed (an inspector from the Michigan Department of Environmental Quality), and I arrived at Howard Finishing's Roseville facility at approximately 9:30 a.m. on July 11, 2012. We met Leslie Pholen, the Safety Manager, and David Clarke, a chemist. Later, during the tour of the Roseville facility, we met Popat Patel, the environmental contact. Ms. Pholen and Mr. Clarke described the operations of both the Roseville and Madison Heights facilities.

There are 85 employees at the Roseville facility, and 175 at Madison Heights. Both facilities operate 24 hours a day, 7 days a week. The Roseville facility consists of four plating lines: Line 1 – a hexavalent chromium flash-plating line, which Howard Finishing has not operated since February 2012; Line 3 - a zinc-plating line; Line 4 - a nickel/chromium-plating line, which has five nickel and two hexavalent chromium tanks, and Line 5 – another zinc-plating line. Howard Finishing controls zinc emissions from the two zinc-plating lines with a hydrochloric acid scrubber, and controls chromium emissions from the chromium flash-plating line with a wet scrubber and from the nickel/chromium-plating line with a composite mesh-pad scrubber. For each of the chromium tanks, which are subject to Subpart N, Howard Finishing also adds a fume suppressant with a wetting agent to control emissions. It monitors and records daily the surface tension of these tanks with a stalagmometer. During the plant tour, we looked at the surface tension records and noted that Howard Finishing adds the fume suppressant whenever the surface tension is near 45 dynes/centimeter. We saw no deviations of the 45 dynes/centimeter limit of Subpart N. With regard to the five nickel tanks, which are subject to Subpart WWWWW, Howard Finishing adds a fume suppressant with a wetting agent to two of them (according to Mr. Clarke, it would be three, but Howard Finishing is not currently using the third tank).

After observing the Roseville plating lines, we drove to the Madison Heights facility. Mr. Clarke and Ms. Pholen again joined us. We arrived at approximately 11 a.m., at which time we toured the facility.

The Madison Heights facility consists of one currently-operating line, E-Coat (Cathodic Epoxy Electrodeposition Primer). There is another coating line on-site, Phosphate Barrel, which Howard Finishing has scheduled to remove in August 2012 due to decreased business (during our inspection, it was just used for cleaning). It also removed five other lines in 2011.

Dijac Jakupovic, a line operator, walked us through the E-Coat process. There is no emissions control for the E-Coat line, just exhaust fans. Howard Finishing tracks the volatile organic compound (VOC) content of this line, which is typically at 0.5-0.6 pounds/gallon. Mr. Clarke said that the total amount of VOCs emitted from the Madison Heights facility was 13-14 tons for the last rolling average month. After the tour, we examined VOC emission records.

We concluded our inspection at 11:45 a.m.

Records Received:

- 1) Plant layout;
- 2) E-Coat line schematic;
- 3) E-Coat VOC emissions (January-June 2012);
- 4) VOC emissions calculations for June 2012;
- 5) Product spec. sheet for CorMax® III Black;
- 6) Material safety data sheet (MSDS) for Chemkleen Additive 163;
- 7) MSDS for Fixoidine Z-10;
- 8) MSDS for Bonderite 958 Makeup;
- 9) MSDS for Bonderite 958 Replenishing G;
- 10) MSDS for Bonderite 958 Replenishing Z:
- 11) MSDS for Additive 301;
- 12) MSDS for Additive 302;
- 13) MSDS for Additive 319;
- 14) MSDS for Accelerator 131;
- 15) MSDS for Parcolene 99X;
- 16) MSDS for Pigment Feed CorMax® III;
- 17) MSDS for Resin Feed CorMax® 111.